

Curriculum Vitae

Prof. Dr. med. Wolfram-Hubertus Zimmermann

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Education

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| 2007 | Habilitation and Venia Legendi, Pharmacology and Toxicology |
| 2006 | Board Certification in Pharmacology and Toxicology |
| 1995-1997 | Experimental Thesis in Pharmacology
University Medical Center Hamburg-Eppendorf, Hamburg, Germany |
| 1998-2001 | Postgraduate course in Molecular Biology
Center for Molecular Neurobiology and Institute of Pharmacology,
University Medical Center Hamburg-Eppendorf, Hamburg, Germany |

Clinical electives at:

- Duke University Medical School, Durham, USA
- Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, USA
- Mount Auburn Hospital, Harvard Medical School, Boston, USA
- Groote Schuur Hospital, University of Cape Town, South Africa

Academic Career

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| Since 2008 | Professor (W3) and Director
Institute of Pharmacology and Toxicology, University Medical Center Göttingen,
Germany |
| 2004 - 2008 | Junior Professor (Assistant Professor)
Institute of Pharmacology and Toxicology, University Medical Center Hamburg-
Eppendorf, Hamburg, Germany |
| 2003 - 2004 | Lecturer and Staff Scientist
Institute of Pharmacology and Toxicology, University Medical Center Hamburg-
Eppendorf, Hamburg, Germany |
| 1999 - 2003 | Resident
Clinical Pharmacology, University Erlangen-Nuremberg |

Curriculum Vitae

Fellowships, Awards, and Honours (selected)

2021	Honorary Award Lecture on Basic Science, German Society of Cardiology
2018	President, 3 rd German Pharm Tox Summit / 84 th Annual Meeting of the German Society of Pharmacology and Toxicology
2015	International Engagement Award, Basic Cardiovascular Science Council, AHA
2014	Start-Up-Innovation Award by the Göttingen County
2008	Fellow of the American Heart Association (AHA)
2007	Dr. Martini Award by the Dr. Martini-Stiftung
2007	Hengstberger-Stipend by the German Society of Cardiology
2005	Fraenkel-Award by the German Society of Cardiology
2004	Young Investigator Award (European Section) by the International Society for Heart Research
2002	Minerva Short-Term Research Stipend at the Gepstein lab (Technion, Haifa, Isreal) by the Max-Planck Society
2001	Research-Award for Development of Research Tools to Reduce Animal Experiments by the Federal Ministry of Food, Agriculture and Consumer Protection
2001	Oskar-Lapp-Award by the German Society of Cardiology

Professional Activities

Editorial Boards	<ul style="list-style-type: none">• Circulation Research• Journal of Molecular and Cellular Cardiology• Cardiovascular Research• Basic Research in Cardiology• Regenerative Therapy
Memberships	<ul style="list-style-type: none">• German Society of Pharmacology and Toxicology (DGPT)• German Society of Cardiology (DGK)• European Society of Cardiology (ESC)• American Heart Association (AHA)• International Society of Heart Research (ISHR)• International Society for Stem Cell Research (ISSCR)• Safety Pharmacology Society (SPS)

Curriculum Vitae

Research Interests

Tissue-engineered heart repair, therapeutic genome editing, stem cell biology, disease modelling and drug discovery in stem cell models, cell-cell/organ-organ cross talk, translation from bench-to-bedside, early clinical trials, ATMPs

Selected Publications

Zimmermann WH, Fink C, Kralisch D, Remmers U, Weil J, Eschenhagen T. (2000) *Three-dimensional engineered heart tissue from neonatal rat cardiac myocytes*. *Biotechnol Bioeng* 68:106-114.

Zimmermann WH, Schneiderbanger K, Schubert P, Didie M, Munzel F, Heubach JF, Kostin S, Neuhuber WL, Eschenhagen T. (2002) *Tissue engineering of a differentiated cardiac muscle construct*. *Circ Res* 90:223-230.

Zimmermann WH, Melnychenko I, Wasmeier G, Didie M, Naito H, Nixdorff U, Hess A, Budinsky L, Brune K, Michaelis B, Dhein S, Schwoerer A, Ehmke H, Eschenhagen T. (2006) *Engineered heart tissue grafts improve systolic and diastolic function in infarcted rat hearts*. *Nat Med* 12:452-458.

Zafeiriou MP, Bao G, Hudson J, Halder R, Blenkle A, Schreiber MK, Fischer A, Schild D, **Zimmermann WH** (2020) Developmental GABA polarity switch and neuronal plasticity in Bioengineered Neuronal Organoids. *Nat Commun.* 11:3791.

Raad FS, Khan TA, Esser TU, Hudson JE, Seth BI, Fujita B, Gandamala R, Tietze LF, **Zimmermann WH**. (2021) Chalcone-Supported Cardiac Mesoderm Induction in Human Pluripotent Stem Cells for Heart Muscle Engineering. *ChemMedChem.* 16:3300-3305.

Didié M, Christalla P, Rubart M, Muppala V, Döker S, Unsöld B, El-Armouche A, Rau T, Eschenhagen T, Schwoerer AP, Ehmke H, Schumacher U, Fuchs S, Lange C, Becker A, Tao W, Scherschel JA, Soonpaa MH, Yang T, Lin Q, Zenke M, Han DW, Schöler HR, Rudolph C, Steinemann D, Schlegelberger B, Kattman S, Witty A, Keller G, Field LJ, **Zimmermann WH**. (2013) *Parthenogenetic Stem Cells for Tissue Engineered Heart Repair*. *J Clin Invest* 123:1285-1298.

Godier-Furnémont AFG, Tiburcy M, Wagner E, Dewenter M, Lämmle S, El-Armouche A, Lehnart SE, Vunjak-Novakovic G, **Zimmermann WH**. (2015) *Physiologic force-frequency response in engineered heart muscle by electromechanical stimulation*. *Biomaterials* 60:82-91.

Chang Liao ML, de Boer TP, Mutoh H, Raad N, Richter C, Wagner E, Downie BR, Unsöld B, Arooj I, Streckfuss-Bömeke K, Döker S, Luther S, Guan K, Wagner S, Lehnart SE, Maier LS, Stühmer W, Wettwer E, van Veen T, Morlock MM, Knöpfel T, **Zimmermann WH**. *Sensing Cardiac Electrical Activity With a Cardiac Myocyte--Targeted Optogenetic Voltage Indicator*. *Circ Res.* 2015 Aug 14;117(5):401-12.

Riegler J§, Tiburcy M§, Ebert A, Tzatzalos E, Raaz U, Abilez OJ, Shen Q, Kooreman NG, Neofytou E, Chen V, Wang M, Meyer T, Tsao PS, Connolly AJ, Couture LA, Gold JD, **Zimmermann WH***, Wu JC*. (2015) *Human Engineered Heart Muscles Engraft and Survive Long-Term in a Rodent Myocardial Infarction Model*. *Circ Res* 117:720-739. §first authors; *corresponding authors

Tiburcy M, Hudson JE, Balfanz P, Schlick S, Meyer T, Chang Liao ML, Levent E, Raad F, Zeidler S, Wingender E, Riegler J, Wang M, Gold JD, Kehat I, Wettwer E, Ravens U, Dierickx P, van Laake LW, Goumans MJ, Khadjeh S, Toischer K, Hasenfuss G, Couture LA, Unger A, Linke WA, Araki T, Neel B, Keller G, Gepstein L, Wu JC, **Zimmermann WH**. (2017) *Defined Engineered Human Myocardium with Advanced Maturation for Applications in Heart Failure Modelling and Repair*. *Circulation* 135:1832-1847.